



An Interdisciplinary Study of Japan Overseas Cooperation Volunteers (JOCV)

The Hearts, Minds, and Sentiments: The Volunteers Program in the Immunization Program in Bangladesh and the Chagas Diseases Control Project of Honduras





JICA Research Institute

Use and dissemination of this working paper is encouraged; however, the JICA Research Institute requests due acknowledgement and a copy of any publication for which this working paper has provided input. The views expressed in this paper are those of the author(s) and do not necessarily represent the official positions of either the JICA Research Institute or JICA.

JICA Research Institute 10-5 Ichigaya Honmura-cho Shinjuku-ku Tokyo 162-8433 JAPAN TEL: +81-3-3269-3374 FAX: +81-3-3269-2054

The Hearts, Minds, and Sentiments: The Volunteers Program in the Immunization Program in Bangladesh and the Chagas Diseases Control Project of Honduras

Naoko UEDA*

Abstract

This paper argues that the work of the Japan Overseas Cooperation Volunteers (JOCV) brought about sustained developments in social capital in the host communities and contributed to motivating people to change their individual behavior. A mixed-methods approach using semi-structured interviews and surveys was used to examine how Volunteers worked to instill "norms", "trust," and affect changes of "sentiment" among people in two developing countries, Bangladesh and Honduras. Specifically, the paper is concerned with the activities undertaken by the JOCV within the Polio Control/EPI (Expanded Program on Immunization) programs in Bangladesh from 1999 to 2015, and the Chagas Disease Vector Control program carried out in Honduras from 2003 to 2011. The key findings of the study include: In Bangladesh, the JOCV contributed to improving the motivation of field workers, demonstrating that their "trust" for enlarging the acceptance of vaccinations has increased as a result of their work; this then resulted in vaccinations becoming the new "norm" for the community. In this respect, the increased "trust" and changing "norms" contributed to the 2004 polio free declaration in the country by altering social capital. In Honduras, the JOCV promoted the creation of an "exchange of responses" between health administrations and communities by stimulating the intrinsic motivation of the people concerned and generating positive sentiment among them. As a result, three common "sentiments" were identified among local Community Health Volunteers: happiness, a sense of achievement, and pride. This indicates that the JOCV created and altered social capital that supported self-sustained vector control. In both Bangladesh and Honduras, the Volunteers accompanied their local colleagues during fieldwork, spoke the same language, and shared common successes and failures. Cooperation between JOCV and local colleagues was an important factor in altering the hearts, minds, and sentiments of the local partners and communities, and contributed to the achievement of the important goal of disease control. This paper argues that more attention should be focused on the heart, mind, and sentimental aspects of the individual aid workers.

Keywords: Japan Overseas Cooperation Volunteers (JOCV), social capital, sentiment, Polio/Expanded Program on Immunization, Chagas Disease Control

^{*} Chief Advisor, JICA Project for Capacity Building of Nursing Services, Bangladesh (ueda.naoko@jica.go.jp)

This paper is part of the JICA (Japan International Cooperation Agency) Research Institute research project: "An Interdisciplinary Study of Japan Overseas Cooperation Volunteers (JOCV)". The author prepared this study in her personal capacity. The opinions expressed in this article are the author's own and do not reflect the view of the affiliated organization.

1. Introduction: The Volunteers - What Did They Change

More than a half a century has passed since the establishment of the Japan Overseas Cooperation Volunteers (JOCV). Since then, approximately 51,000 Volunteers have been dispatched to 96 developing countries.¹ Even though their individual power is small, every day the young Volunteers, focusing on the value of their work and their situation, discover new ways to contribute to their host community and try their best to communicate with their hosts so as to help them make a better life for themselves. This paper explores how the JOCV has worked and acted for the betterment of partners in developing countries. It is particularly concerned with what the JOCV has achieved and what the Volunteers have changed in the host communities.

The case studies discussed in this paper include the national vaccination program of the People's Republic of Bangladesh, especially in relation to the prevention of poliomyelitis, the "EPI: Expanded Program on Immunization," and the measures for the prevention of parasitic infectious disease, known as the "Chagas Disease Control Project," in the Republic of Honduras.

The first section of this paper presents the analytical framework of the study. Specifically, it examines the relationship between Social Capital (hereafter referred to as "SC") and the "sentiment"² of the people concerned. The paper then investigates the EPI program in Bangladesh, primarily to show how the diligence and correctness or accuracy of the Volunteers developed the "trust" and "norms" of both their Bangladeshi counterparts and of the people in the community. The final section of the paper investigates the cycle of "trust", "norms", and

¹ The Volunteers included: JOCV (Japan Overseas Cooperation Volunteers): aged 20-39 years; SV (Senior Volunteers): aged 40-69 years; and "Youth and Senior Volunteers for *Nikkei* Communities" in Latin American countries. From the 51,238 Volunteers that have been sent to 96 countries since the establishment of JOCV, 43,116 had been sent to 88 countries (as of September 2017).

² "Sentiment" can mean emotion in the sense of primitive feelings or physical sensation; however, in the context of this paper, the term sentiment expresses a rational sense that is used in social contexts. Here, the author investigated sentiment in the context of social changes brought about by aid.

changes in the "sentiment" of local people that brought about a "responsiveness" and "exchange of responses " in the Chagas Disease Control Project.

2. Social Capital and Sentiment

2.1 Social Capital: "Trust," "Norms," and "Responsiveness"

Social Capital (SC) is employed as a conceptual lens through which to view the central question of this research: How have the Volunteers changed the hearts and minds of the host community, and what did they actually do?

SC has wide acceptance in sociology. There are various definitions of the term depending on its context, nature, and function. In this paper, SC is defined as a social determinant that conditions the actions of individuals and groups; the capital that brings about a set of particular outcomes and features in social organizations, such as trust, norms, and networks, that can improve the efficiency of society by facilitating coordinated action to implement sustainable systems (Putnam 2001; Coleman 1988; Coleman 1990).³ This paper pays attention to norms, trust, and the collective values of the social networks that underpin SC (Putnam 2001). In particular, it looks at trust, which is central to the foundation of SC.

SC is classified into two categories: institutional (structural) SC and cognitive SC. These two categories are thought to interact and be mutually complementary. Trust is conceptualized as the core component of cognitive SC and is concerned with the minds of

³ Social capital can be divided into two parts: (1) the structure of society that facilitates certain actions by participants (Coleman 1988, 1990), which may include reciprocity and altruism; and (2) responsiveness (Putnam 1993) and synergy (Evans 1996). In the 1970's, Bourdieu analyzed social capital as the capital that divides people. In contrast, Coleman, known by his rational choice theory, thought that SC had a different function. He stated that SC facilitates certain actions of individuals who are within the social structure, and that it is productive, making possible the achievement of certain ends that would not be attainable in its absence (Coleman 1990, 302).

individuals, while norms and networks comprise the institutional components of SC as they directly regulate the visible and concrete behavior of individuals.

Cognitive SC is formulated in the mind of individuals, and those who have this tend to accumulate it more than those who do not. Gambetta (2010, 277) defined "trust" as "a particular level of the subjective probability with which an agent assesses that another agent or group of agents will perform a particular action." Meanwhile, Ostrom (2010, xvi) characterized "trustworthiness" as "preferences that are consistent with conditional cooperation even in the absence of material incentives." The creation and destruction of cognitive SC can be explained in terms of good and vicious cycles; for example, the more we use trust, the more we gain trust. However, this capital deteriorates when the individual feels betrayed and no longer has trust in the person who they believe has betrayed them. Trust can also be the foundation of the development of other forms of institutional SC-such as norms. For example, the norm of "generalized reciprocity"⁴ is connected with the density of the network of social exchange. If you trust others it is likely that they will trust you in return, and this in turn might foster generalized reciprocity. In this way, trust is one of the essential elements of SC because it also becomes a source of other forms of SC.

The author focuses on norms as the core of institutional SC as they reflect and regulate the concrete acts and behavior of individuals. "Norms" are defined as "general rules that regulate society and its members by placing a certain pressure or restraint on them" (Hamashima et al. 2008, 108). Some examples of norms discussed in this paper concern the attitudes of the Volunteers and the way they are expressed through behavior such as accuracy, politeness, or acceptance of immunization in the community.

⁴ Reciprocity is categorized as "balanced or specific reciprocity" and "generalized (or diffuse) reciprocity." The latter implies the "continuing relationship of exchange that is at any given time unrequited or imbalanced, but involves mutual expectations that a benefit granted now should be repaid in future" (Putnam 1993, 172).

The term "responsiveness" in this paper draws on Putnam's concept of institutional performance (Putnam 2001, 9) and Dahl's (1981) conceptualization of democracy as a responsive system of government. Dahl (1981: 1) states that "a key characteristic of a democracy is the continuing responsiveness of the government to the preferences of its citizens, considered as political equals." As the diagram below illustrates, responsiveness is thus understood as a flow of mutual responses, not a one-way flow or a top-down flow from the administrative level to the individual residents. Rather, the residents and the administration/government respond to each other in a sustainable manner, thus forming the basis of the SC. The author defines responsiveness in the following way: "the actor produces an output, with responsibility, responding to the input or request that the actor receives."



Figure 1: Concept of Social Capital: Prepared by the author

2.2 Methodology

Using the two case studies of Bangladesh and Honduras, this paper will analyze how the JOCV have succeeded in developing both cognitive and institutional SC, namely trust as the cognitive SC, and norms as the institutional SC. In the first case study, Bangladesh, the paper draws on 16 semi-structured interviews. The interviews were conducted by the author in October 2014 and May 2017. Ten of the participants were Bangladeshi EPI administrators in Chittagong Division

who had experiences working with Japanese Volunteers. Six of the participants were from the JOCV, and among them five were Volunteers on active duty and one was a former Volunteer. The interviews utilized open-ended unstructured questions organized thematically around the participant's view of their experiences working with their Bangladeshi counterparts (Bangladeshi participants were asked about their Japanese counterparts and vice versa), how they felt about their counterparts, what they learned from them, and the obstacles to they faced when fulfilling their required duties. The interview participants were both male and female. The Bangladeshi participants were all over 40 and had work experience as EPI Superintendents, Public Health Nurses and Health Assistants. The Japanese participants were around 30 years of age and five were female and one male.⁵

In the second case study on Honduras, the paper draws on 72 semi-structured interviews and quantitative surveys conducted by the author with Community Health Volunteers (CHV). The mean age of those interviewed was 42.6 years (SD=10.8) and the interviews took place in four areas, namely, Ocotepeque, Copán, Intibucá, and Comayagua. The participants included both male and female CHVs, ranging from completely inexperienced CHVs to those with 42 years of experience (the mean number of months of experience was 123.3, SD=36.3). Surveys were composed of 18 questions about the participants (such as name, age, and family members), their daily lives (profession and facts about their community), and their volunteer work (such as how they became a CHV, the kind of activity they are engaged in, how long they spend their time as CHV, and how they feel about being a CHV).

The key findings of the study are that in the Bangladeshi case, the norms held by the Volunteers were expressed through their engagement with local partners resulting in the Volunteers gaining the trust of the health workers. Trust enabled some of the other norms of the

⁵ All quoted words mentioned in this paper are from personal communication with each interviewee, not from the documents survey.

health workers to change norms and trust of the people in the community. Circulation of trust and norms are also observed in the Honduras case study where trust led to changes in norms; in return, this then generated more trust. This illustrates the cycle of cognitive and institutional SC, which also creates responsiveness, another important component of SC.

2.3 "Sentiment" and "Responsiveness"

This section considers how the sustainability of the responsiveness of the local people is assured. It focuses on the sentiment of the local people as an important element of their intrinsic motivation to ensure the sustainability of responses.

In the mid-1970s, emotional sociology emerged in response to the need to understand the role of emotion or sentiment in society and in human behavior. According to Hochschild (2000), sentiment is constructed in social contexts, but there is some variance in how it is expressed depending on sex or status distinctions. Sentiment is communicated through the "feeling rules" of direction, extent, and continuity fostered in the society under a certain set of circumstances. Feeling rules, which function to adjust feeling to social circumstance, include such items as manners and etiquette. In a broader sense, these rules may also contain religious norms, ideology, views on values, and other characteristics of the society concerned.

The concept of feeling rules has a relationship with the elements of SC focused on in this paper. If we can hypothesize that the Volunteers have encouraged the development of SC, responsiveness would also be secured and sustained as the intervention of any Volunteer is controlled by feeling rules or other social mechanisms. This process may lead to a change of sentiment among local people, thus bringing to the fore their intrinsic motivation for the continuation of responses.

As noted earlier, trust is an important foundation of other components of SC. Still, in the case of Honduras, we can assume that it was not simply trust and norms but other elements contributed responsiveness. Accordingly, the concept of sentiment is applied, as it may also play

a vital role in altering SC, especially the cognitive SC, in terms of moving individual's inner heart and mind. Sentiment can also lead to the intrinsic motivation of continuing responses. This will be discussed in detail later. However, the study in these fields is still limited and further research is needed.

3. The Bangladeshi Expanded Program on Immunization: trust and norms

3.1 The EPI and the Volunteers

In 1974, the World Health Organization (WHO) adopted the Expanded Program on Immunization (EPI) in order to control six vaccine-preventable diseases (diphtheria, pertussis, tetanus, polio, measles, and tuberculosis). Implementation of the EPI began in 1977. The program aimed to administer vaccines to every child in the world by 1990, and to prevent the six aforementioned diseases. Efforts to establish vaccine supplies, their logistics chains, the provision of technical assistance and promotion, and the strengthening of immunization awareness-raising activities were also carried out. This program was based on the global consensus on the need for cooperation to control vaccine-preventable diseases worldwide, which arose out of success experienced during the eradication of smallpox in 1980.⁶ Building on the knowledge acquired during the process of introducing smallpox-free global measures, the next target was polio. In 1988, the WHO set a target for a polio-free world by launching the Global Polio Eradication Initiative, spearheaded by national governments. The WHO and other donors agreed to eradicate this disease by the year 2000.

In 1979, the Government of Bangladesh launched an EPI in Dhaka with the support of the WHO; this was then expanded throughout the entire country in 1985. However, that year vaccination coverage was only about 2% as the vaccination delivery point's EPI sites were

⁶ The last naturally infected case of smallpox was in 1977.

limited to district hospitals.⁷ The government of Bangladesh started a program consistent with the strategy of the WHO to achieve its objective of becoming a polio-free state. This included improvements in the coverage of routine immunizations. Most important here was the vaccination of newborns using the NID or National Immunization Day, a nationwide campaign for the vaccination of children under five years old as a supplement to routine immunizations, a mop-up campaign, simultaneous vaccinations in specific areas where infection was detected, and a surveillance of AFP (acute flaccid paralysis) in children.⁸

Prior to 1985 it was estimated that about 11,500 children in Bangladesh exhibited AFP symptoms caused by polio every year. Three mop-up campaigns and 21 NIDs were carried out between 1995 and 2013. The more the coverage improved, the greater the decrease in the number of patients, with only 234 patients at the time of the third NID in 1997.⁹ NID was not implemented between 2000 and 2005, as no new cases were detected and a polio-free state seemed to have been achieved. However, this turned out to be only a temporary state as new cases flowed from neighboring countries like India (2006) and Myanmar (2007). The government of Bangladesh resumed the NID program in 2007. However, since then no new cases have been found, and in March 2014, the WHO Certified the WHO South-East Asia Region, including Bangladesh, as polio-free.¹⁰

⁷ Figure 1: National immunization coverage, 1980-2011.

http://www.searo.who.int/entity/immunization/data/bangladesh_epi_factsheet_2011.pdf. Retrieved 28 October, 2017.

⁸ Immunization against nine preventable diseases, namely, hepatitis-B, diphtheria, pertussis, tetanus, haemophilus influenza (Hib) (as Pentavalent), BCG, measles, polio, and rubella, is delivered to children. The TT vaccine, given to women aged between 18 and 49 years for the prevention of neonatal tetanus, is now available in Bangladesh.

⁹ Table 2. Number and rate of reported poliomyelitis and AFP cases and stool specimen results, by year for Bangladesh, 1992-1997. http://www.cdc.gov/mmwr/preview/mmwrhtml/00050881.htm#00001630.gif. Retrieved 28 October, 2017.

¹⁰ WHO divides the world into six regions. The WPR (Western Pacific Region, consisting of 37 countries and areas that include Japan and China) was certified as polio-free in 2000. Bangladesh, India, and Myanmar are classified within the SEAR (South East Region) countries.

Even after the Bangladeshi government had succeeded in controlling polio within the country, JICA continued to dispatch Volunteers to Bangladesh, as there was a continued need to control the disease in the areas with the national borders.¹¹

Prior to its experience in Bangladesh, JOCV had obtained relevant experience in infectious disease control activities in the rural areas of other developing countries. Since 1970, Volunteers had participated in a number of activities beginning with a smallpox eradication program in Ethiopia. JOCV activities at that time focused on promotion of the program, technical assistance for quality improvement of the vaccination program, surveillance, and raising the awareness of the disease among the community. Using these experiences and responding to the global movement for polio–free , JICA launched its support of EPI and selected target countries for JOCV - Niger, Kenya, and Bangladesh. Between 1999 and 2015, 65 EPI Volunteers were sent to Bangladesh.

3.2 The Volunteers: What They Have Achieved

The first generation of EPI Volunteers was dispatched in 1999. These Volunteers were mainly stationed in hospitals and were involved in the surveillance of children with AFP. They were assigned to the Ministry of Health and Family Welfare's EPI and Surveillance headquarters in Dhaka. Volunteers visited and assisted the activities in rural communities to monitor the surveillance and coverage of immunization in infected areas before gradually shifting to the Eastern area as the WHO increased the number of doctors in the field. Initially there were two Volunteers in one district in the Chittagong Division, but later the pattern became one Volunteer per district. Volunteers were assigned to the Civil Surgeon Office, District Health Office in

¹¹ In addition to sending Volunteers, the Japanese Government also assisted with the cooperative plan for gaining a polio-free status in Bangladesh in other ways. Japan's Official Development Assistance provided the equivalent of 4,364,000,000 yen worth of polio vaccines from the Second NID in 1996 until the eleventh NID in 2003. They also supplied cold chain equipment in 1996 and 1997.

Bangladesh (CSO) under the Ministry of Health and Family Welfare, where they provided support for routine immunizations and NID. The specific goals of their activities were as follows: (1) As a member of the NID team of CSO, improve vaccination coverage by assisting at EPI sites and on home visits; (2) Improve the coverage of routine vaccinations; (3) Improve the quality of the daily work of field workers; (4) Provide assistance to those carrying out coverage surveys and surveillance of AFP patients in collaboration with the WHO; and (5) To promote and raise awareness of the importance of vaccinations in the local community.

Although most of the Volunteers did not have medical expertise, they were assigned to the CSO, which was an implementation body for the EPI. The Volunteers tried to improve the coverage and quality of EPI in the field by instructing inspectors, the field workers, and their supervisors about clean and accurate vaccinations. Additionally, they worked in remote areas with the field workers to identify unvaccinated children using the "Mapping"¹² and the "Child-to-child"¹³ methods to secure better vaccination coverage. The Volunteers worked alongside field workers and inhabitants of the local community and communicated in Bengali, even though they were not initially fluent in that language.¹⁴

The paper will now consider the activities undertaken by the Volunteers in detail. With respect to the first goal of nationwide coverage for NIDs, the Volunteers ran field worker orientations, discussed social mobilization, assisted with micro-planning for each of the EPI

¹² The Volunteers trained the field workers for the post-NID pilot survey by visiting all the households in some areas of the Noakhali district. The purpose of this engagement was to ensure all of the houses in the targeted area were visited, and that the program was supervised. The supervisors and field workers were to: 1) draw a map of each of the designated areas; 2) clarify the borders between these areas and each assigned area for every team (sub-block); 3) provide the names of all the residents living in these border areas; and 4) calculate the numbers of households in each sub-block. This method, called "Mapping," ensured they did not miss any household in the border areas. This methodology, and its associated training, was adopted throughout the country from the seventh NID.

¹³ Using this method, Volunteers are able to confirm vaccinations by visiting all of the households on the day after the NID. If they find any unvaccinated children during their visit, they immunize the child instantly. This is also called the "House-to-house method."

¹⁴ All JOCV are supposed to work in the local languages. They are give a 70-day intensive language training course before leaving Japan and attend a one-month additional language class upon arrival. This is then followed by home-stay training before they leave for their place of assignment.

sites, and accompanied supervisors to the field on NID. After NID, the Volunteers compiled and presented the problems raised, discussed countermeasures with the NID evaluation committee, and focused on pursuing realistic and possible measures in the Hard-to-Reach Areas (HTRs) where access is not easy (e.g. sandbanks), and in the areas where EPI was not progressing as expected.

For Goal 2 and Goal 3, to improve the accuracy of the field workers' daily tasks, the Volunteers rotated between those EPI sites that were showing poor performance. Along with the site supervisors, the Volunteers sought to grasp the problems that the workers were having, such as low motivation and poor attitudes, and guided supervisors and workers towards better work practices. Additionally, through conversation with mothers whose children were to be vaccinated and continuous visits to the sites, including those recording poor performance, Volunteers tried to motivate the workers and raise the mothers' awareness of the need for and importance of vaccinations. They also paid attention to the small things that tended to be neglected by workers or supervisors and reported these to the Ministry; thus, workers were motivated to be more careful about daily routine work practices such as planning, implementation, monitoring, and reporting. The installation of medical disposable trash boxes and guidance on the handling of open vaccines are good examples of the changes that were implemented. The Volunteers discussed field difficulties and challenges with supervisors on-site and reported to the Ministry in the capital. The more important points in the reports were passed on to CSOs from the Ministry.

For Goal 4, to enhance the surveillance network, the Volunteers held community meetings in each village and invited various community actors including traditional healers, leaders, religious people, nurses, midwives, NGO staff, teachers, and students to attend. Council members of the Union, the smallest administrative units in Bangladesh, were also involved in these educational events. In kindergartens, the Volunteers explained to parents how they can find children suffering from AFP. Most of the participants in these assemblies were positive and listened eagerly to the Volunteers, especially as they explained things plainly with the aid of pictures and illustrations. Moreover, the enjoyment that the participants got from the rare situation of young foreigners speaking in their language, Bengali, also helped to attract village people to the meetings (JICA Bangladesh Office 2007). Many participants are reported to have listened carefully to the presentations given by the Volunteers and accepted the cooperation in surveillance matters offered during the talks (JICA Bangladesh Office 2007).

The fifth goal of raising awareness of EPI, was a particularly successful activity for the Volunteers who were not equipped with medical skills or knowledge. As with Goal 4, the Volunteers tried to appeal to multiple layers of the village community, from leaders to the mothers at EPI sites. On these occasions, too, the Volunteers communicated in Bengali and used various methods such as using pictures to explain the importance of EPI so that listeners would not become bored; this also ensured that illiterate mothers were able to understand the message they were conveying (JICA Bangladesh Office 2007).

3.3 The Volunteers: What They Have Changed

Between 1995 and 2011¹⁵ polio vaccination coverage in Bangladesh increased from 69% to 96%. The expansion of coverage and the improvement of accuracy and careful on-site surveillance of vaccinations, contributed to the polio-free status gained by the state in 2014. It is the effort of the government of Bangladesh that should be praised most highly, even though it owes a great debt to other technical, physical, and financial supporters such as the WHO and UNICEF. However, the role of the JOCV who collaborated at vaccination sites and who spoke the language of the local people should also be highly commended. To ascertain what the Volunteers were able to change for their Bangladeshi collaborators and the residents through the

¹⁵ Figure 1: National immunization coverage, 1980-2011.

http://www.searo.who.int/entity/immunization/data/bangladesh_epi_factsheet_2011.pdf. Retrieved 28 October, 2017.

activities mentioned above, the paper will investigate the themes of networking, presentation of norms, raising of motivation, and the formation of trust.

3.3.1 Networking

The Volunteers connected field workers with their superiors in the CSO by sharing with them the problems that the workers faced on site and discussing countermeasures. For the field workers, the Volunteers were young foreigners with no political agenda or financial interests in the country's EPI. They were not superiors or technical experts like doctors sent from WHO, but rather, they shared the same problems of implementation as the field workers at the various sites.

The Volunteers optimized their unique position to connect the bottom with the top, even within the ministerial hierarchy that existed among the field workers, their supervisors, and the people in the capital. Until the Volunteers became involved, the information flow was mainly one way, from top to bottom, with little opportunity for reverse flows (JICA Bangladesh Office 2007).

3.3.2 Presentation of Norms to the Field Workers: Accuracy, Diligence, Integrity, and Politeness

Tremendous and rigorous preparation work is required to implement the NID. Micro-planning is needed at each site, at the district, division, and national levels. For example, decisions are required on when to implement the vaccination program, and the number of children to be vaccinated by region, as well as on the procurement of vaccines and the other important materials needed for the recording, distribution, and disposal of used vaccination equipment. Additionally, EPI sites had to be prepared, field workers and local volunteer workers from the community mobilized and trained, and information needed to be shared and advertised for several months beforehand. The Volunteers assisted with the NID and its preparation process, a very complicated, sophisticated, and tremendous administrative operation that is sometimes difficult for some developing countries to accurately implement without support. The same thing can be said for assistance with routine immunizations; the Volunteers helped their Bangladeshi colleagues to make proper records for each vaccinated child, and they explained to mothers the need to return for the next vaccination at the appropriate time intervals (JICA Bangladesh Office 2007).

Carrying out fundamental daily administrative tasks, required performing a given task correctly, managing both budgets and time, planning, implementing, and evaluating each activity alongside medium and long-term planning milestones. All of this had to be done in a way that was polite and sincere to field workers and residents. Through such personal conduct and by completing tasks efficiently and effectively, the Volunteers demonstrated the required norms for carrying out EPI to their Bangladeshi colleagues.

Volunteers demonstrated norms of punctuality, accuracy, respect, and courtesy through their attitudes towards their colleagues and the community, and they showed diligence in searching the community so as not to miss any unvaccinated children. The following comments from the Bangladeshi colleagues who worked with the Volunteers illustrate how much the volunteers' assistance was appreciated.

"They (the Volunteers) worked spontaneously at the place where they are required to. They were all-round players, acted eagerly and politely. What we learned from them was their attitude and time management. They were not only inspector, but also they themselves carried the vaccine and played the important role in the field. They were punctual; sometimes they arrived on the site earlier than the worker. When the Volunteer noticed that the worker made mistake in vaccination, he did not tell the worker strongly on the very spot, but instead, tried to make the other worker do in a correct way later thus enabled the worker to notice that he was wrong. When we, EPI superintendents or officials in CSO noticed the same thing, we scold that worker at the site strongly, but we now know that it is not good, as that not only makes that worker shameful but also makes mother of mal-vaccinated children became anxious. I learned that from the Volunteers" (Mr. Malek, former EPI Superintendent, Chittagong CSO).

"Even when mothers refuse vaccination of their children, the Volunteers visited their home and continued to persuade them patiently. When the Volunteers find mothers reluctant for vaccination, they even walked in their kitchen to explain the importance of vaccination. They explained and exchanged the opinions in a polite way. As vaccination is for women and children, female Volunteers were advantageous in communication with mothers" (Mr. Dewan, EPI Superintendent, Chittagong CSO).

These quotes show that the Volunteers made the Bangladeshi colleagues, field workers, and their supervisors understand the importance and effect of attitude; they showed them how to undertake their daily administrative jobs correctly and politely by doing so themselves. Thus, their Bangladeshi colleagues were able to bring about improvements in the quality and quantity of immunization. To do the daily administrative job requires correct vaccination procedures, maintenance of clean environments, finding unvaccinated children and making sure they are vaccinated, good time and personal management, a polite but persistent attitude towards others, and improvement of the conventional way of doing things (e.g. adding the Bengali almanac to the EPI advertising poster, and the creation, introduction, and dissemination of work checklists). The following words of a Japanese Volunteer who participated in a recent anti-measles vaccination campaign, which has been carried out alongside the polio vaccinations, show the acceptance of these messages:

"When I searched for unvaccinated children persistently after anti-measles campaign as follow-up, the field workers were talking behind me, saying, "Japanese are the people who work like this" (Rika AYA, assigned to Lakshmipur CSO, dispatched 2013-2015).

3.3.3 The Motivation of Field Workers

Being together with the foreign volunteers might have placed pressure on field workers and supervisors, but it also became a good opportunity to motivate and stimulate their willingness to work. The Volunteers, who lived next door, ate the same food and spoke the same language, were different to the experts from other donor agencies; they were observers and guests from outside, but also close colleagues with whom the locals worked together even in hard times. They were sometimes like family members or close relatives with whom they could discuss their true feelings. None of the other outsiders who paid frequent visits to EPI sites from other institutions, including the local medical doctors sent by the WHO, were like the Volunteers. Even those workers who tended to lack motivation to go to work because of the frequent lack of transport and delayed payment of wages had their situation gradually improved by the Volunteers' frequent visits to EPI sites. There are also some cases in the HTR areas where site visits by Volunteers contributed to the improvement of vaccination coverage (JICA Bangladesh Office 2007). Again, the words of their Bangladeshi colleagues are instructive:

"The Volunteers advanced to HTR areas, with no reluctance, even in bad weather or terrible conditions. This attitude motivated field workers. When Volunteers visited HTR areas, they insisted on taking CSOs officials together to make them see the sites in HTR areas by themselves as well. The Volunteers visited all the EPI sites in the district with the list of EPI sites, and that attitude encouraged the field workers so much." (Mr. Robiul, Lakshmipur EPI Superintendent).

In this way, through their presence in the field, the Volunteers sometimes had a positive influence on local communities; this is referred to as the "foreigner effect" by the Volunteers. In Bangladesh, the Volunteers' presence, their views, and their attitudes towards accompaniment and collaboration, stimulated the motivation of field workers. The foreigner effect of the Volunteers manifested itself in various ways. For example, the Volunteers were, to some extent, always in the spotlight as young foreigners, and were even seen as the stranger who speaks the

local language; while this was often the view in rural areas in developing countries, it was especially noticeable in the rural areas of Bangladesh. This affected not only the field workers but also the residents. An interesting example of this was the effort of one Volunteer who tried to draw the attention of residents by painting an advertisement about EPI on his own arm and went to a migrant camp to raise awareness of the program. At that time, the sight of a young foreigner who spoke Bengali was rare enough to attract a gathering of children, and consequently their parents, providing the Volunteer with the opportunity to enter their society in future, even without having to paint anything on his body.

3.3.4 Improvement of Vaccination Acceptance and the Motivation of Residents: Building Trust

In Bangladesh, the acceptance of immunization was hampered by several factors. These may be categorized as: distance to health facilities; the frequency of health worker visits to communities; mother's age, mobility, and educational level; the household economic condition; possession of a radio; and the region involved. Differences in coverage between the sexes were also found to be statistically significant, with male children more likely to be immunized than female children (Bhuiya, Bhuiya, and Chowdhury 1995).

The Ministry of Health and Family Welfare of Bangladesh has also analyzed the reasons for no or partial vaccination. The latter refers to those who do not come again for the next vaccination in a series, even though multiple vaccinations are needed (Directorate General of Health Services 2014, XX). The main reasons identified were: rumors, superstition, fear of side effects, the children do not want to be vaccinated, the children are sick, the parents are busy, the EPI sites are too far, and/or the parents do not know about immunizations. Except for the HTR areas, as one of the most densely populated countries in the world, the Ministry could set the EPI sites near or in a community, and use cars with megaphones and workers on foot to advertise the immunization program that is free to residents. Thus, one of the main challenges to the implementation of the Bangladeshi EPI might be considered to be a lack of information and a low level of belief in the efficacy of the program based on superstition or anxiety. For example, some people think that will not fall ill if they believe in Allah.

To cope with these conventional problems, the Volunteers and field workers contributed to the dissemination of accurate information by explaining, persuading, advocating as well as by visiting each household. This approach was important considering that the norms mentioned in 3.3.2. also led to improvements in the attitudes of field workers towards the building of trust essential for the acceptance of vaccinations.

Streefland et al. (1999, 1713) use a definition of "trust" as being "confidence in the reliability of a person or system, regarding a given set of outcomes or events, where that confidence expresses a faith in the probity or love of another, or in the correctness of abstract principles (technical knowledge)." They also note that gaining the trust of the people is crucial for the acceptance of vaccinations. From their research in Bangladesh and India, the authors further note that in the event of serious side effects, it is the specific health worker, not the medical technology doing the vaccination, that is blamed; they emphasized the importance of trust in health workers. Trust in this context is understood in terms of respect for the health worker's honesty and accuracy and is sometimes more important than trust in medical products or technology (Streefland, Chowdhury, and Ramos-Jimenez 1999, 1713-1714).

If we follow the observations of Streefland et al. (1999), an important attitude that the Volunteers demonstrated in the field in Bangladesh was their politeness, patience, and accuracy, which attracted the trust of the community. Importantly, field workers who were accompanied by Volunteers also won the trust of the community as a result of norms such as patience and accuracy that they acquired from the Volunteers. This trust won from the community led to the new norm of acceptance of vaccinations among the local residents. Specifically, the Volunteers displayed an attitude of stewardship when they went with field workers to villages and households, and this led to the dissolution of fear and distrust among residents, thus widening the

acceptance of vaccinations. The Volunteers therefore succeeded in gaining the all-important trust of the community, by placing of the norms among the health workers, and by changing the norms also among the residents ; the negative situations around the hesitation and refusal of vaccination.

4. Chagas Disease Control: Responsiveness

In Bangladesh, the greater acceptance of vaccinations created by the changes in the norms of field workers and the people's trust in them, may be considered to be the result of the passive involvement of residents or a one-way movement from the administration or Volunteers to the local people.

This section considers "responsiveness," and its developed form "exchange of responses," as elements of social capital brought about by mutual interaction between government administrations and the community.¹⁶

4.1 Chagas Disease Control, Surveillance System with Community Participation and Its Sustainability: the "Exchange of Responses"

Chagas disease is a potentially life-threatening illness in a person infected by the parasite *Trypanosoma cruzi (T. cruzi)*. The illness is mainly concentrated in Latin American countries. T. cruzi, carried inside the intestine of an insect vector, enters the human body via the vector's feces that are excreted at night whilst sucking human blood. The disease is commonly found in marginalized poor areas, as the vector infests the natural materials found in houses in rural areas, (Hotez et al. 2012).

¹⁶ This section is a revised version of parts of the works of Ueda (2013a, 2013b, 2015, and 2016).

In 2000, JICA began dispatching Volunteers to assist in vector control to several Central American countries, including Guatemala, Honduras, El Salvador, Nicaragua, Belize, and Panama. This paper focuses on Honduras, as both the prevalence and incidence rates of Chagas disease in Honduras were among the highest in the Central American countries in 2005 with a prevalence of 3.05% and an incidence of 0.039% (PAHO 2006).

Chagas disease in Central America is transmitted by two principal vector species, *Triatoma dimidiata* and *Rhodnius prolixus. Triatoma dimidiata*, native to this region, is found in both human and natural environments and cannot be eliminated. *Rhodnius prolixus* is an imported species with higher fertility and rates of infectivity than *T. dimidiata*, but it is eliminable due to its limited infestation of human dwellings. For these characteristics, the control measures differed slightly in terms of strategies and techniques. The Volunteers, in cooperation with JICA experts, built a sustainable surveillance system based on community participation to prevent vector-borne transmission in each country. This was achieved by working with the national health administrations, departmental health offices, and communities in those countries.¹⁷

JICA implemented capacity development through the Japanese experts assigned to Ministries and as Volunteers in local health administration offices. The Volunteers were mainly working with local health administrators, ¹⁸ Community Health Volunteers (CHVs), non-professional village health workers. To interrupt the vector-borne transmission of the disease, JICA and its Honduran counterparts made an effort to establish a vector control system with community participation. The system consists of two phases, namely, the attack phase,

¹⁷ Except for Panama and Belize where only JOCV were sent. For the content of the project activity in Honduras, please see Ueda (2013a; 2013b).

¹⁸ The measures of improvement of house materials, such as plastering of holes in the walls, are also effective in preventing the spread of vectors.

during which insecticide is sprayed in houses, and the monitoring phase, during which individuals keeps a low domestic infestation rate of the vector.¹⁹

4.2 The Volunteers: What Have They Achieved

Among the activities mentioned above, the young Volunteers implemented capacity building measures in administrations from top to bottom in terms of administrative and technical capacity for disease control, and intervened in local CHVs; while experts from JICA collaborated mainly with administrators from the Capital and departmental health offices.

The following are the words of local Honduran health officers:

"The Volunteers were always with us." "We walked and walked to deep in the mountains." "We were sweating together."

The attitude of the Volunteers, who did not hesitate in accompanying local health officers along mountainside trails to the remote areas where the vector is common, has been praised by people involved with disease control, including the WHO, and others organizations in Southern America. Again, the willingness to continuously accompany local people was unique to the Japanese Volunteers, and no other experts behaved in this way. This attitude greatly fostered teamwork and a sense of belonging among the team of Volunteers and their Honduran colleagues; this in turn led to an optimization of the outcomes of the program. Even in the most remote areas, the Volunteers worked in solidarity with their Honduran colleagues, assisting them, supporting them, and solving problems with them. They did not just sit in an office or do the jobs for their Honduran colleagues but rather worked alongside them.

In Honduras, as in Bangladesh and many other countries, the Volunteers spoke in the same language as their colleagues and the CHVs. They supported local health officers when they

¹⁹ JICA also cooperated in blood screenings to control the transmission of diseases through blood transfusions.

explained vector control to the CHVs. Volunteers also assisted by helping to create audio-visual materials, and they assisted in CHV meetings. They also talked directly to school children using picture play, coloring books, and many other means to help them understand the importance of vector control in their houses. The curious and active children became contributors in the search for vector insects in their homes.

4.3 The Volunteers: What Have They Changed

4.3.1 The "Responsiveness" that Brought about a Sustainable Surveillance System with Community Participation

The surveillance system, which incorporated the participation of community volunteers, consisted of entomological and epidemiological monitoring of houses (Hashimoto & Yoshioka 2012). The CHVs were encouraged to educate their neighbors, search for vectors, and try to prevent the spread of Chagas disease by cleaning up of the environment and bringing any vector found to the attention of the local public health office. The Volunteers made the most of the CHV meetings at the local public health office and used them to educate and raise awareness of the CHVs. They also tried out some new ideas such as the installment of a small vector box into which the CHVs could deliver any vectors they found even when the health facilities were not open, and other new educational devices to meet the daily needs of the residents. This routine of searching for and delivering vectors was organized by the CHVs. Upon receiving a vector, the health administration instructed the CHVs to spray insecticide in their houses. At the same time, the Volunteers promoted the administration of the process to show their thanks and respect to the CHVs for searching for and delivering the vectors. If the administration had failed to respond correctly, they would have lost the trust of the community. This cycle of CHV's searching and delivering insects to the administration, and the response from the administration, became a new norm that built trust between the two actors; in turn this enabled the creation of responsiveness for a sustainable surveillance system with community participation.

This cycle can be described as an "exchange of responses" between the community and the administration. "Response" here means the act of an individual or institution aimed at producing fair and responsible outputs after receiving inputs from the social environment. Responses were exchanged between people in the community and the different levels of public health administration.

The exchanged elements were diverse: captured vectors, ordering the spraying of insecticides, information, techniques, volunteer services, educational activities, and sentiments. These elements were responded to and exchanged, thus forming the exchange of responses between the community and its administration. These exchanges were a basic mechanism for creating a sustainable surveillance system that relied on community participation.

With the help of the public health authorities, the Volunteers succeeded in using this "exchange of responses" to bring about sustainable achievements at the community level. This was achieved through: 1) activities that ensured visibility of achievements; 2) having Volunteers accompany Honduran staff into the field; and 3) promoting capacity development among people involved in vector control in terms of their awareness, participation, knowledge, skills, and action at multiple levels.

Before Volunteers had come into the field to assist with the control of the Chagas disease, CHVs in rural areas had undertaken activities related to the care of mothers and children; however, these were subcontracted activities that had been ordered by local health offices. There had not been an interactive flow of activities between administration and community, based on a CHVs active participation in the process. But when the administration needed to search for nocturnal vectors in houses in a sustainable way, there was no other way to set up the system other than mobilizing CHVs to actively participate and to respond without delay. The Volunteers played an active and vital role in connecting each party and helping them to interact in a sustainable way.

4.3.2 What was the Intrinsic Motivation for "Exchange of Responses"

To assure the sustainability of the "exchange of responses," it was important to foster the intrinsic motivation of both sides to continue the activities. As the motivation became more intrinsic, changes in sentiment were observed among the CHVs and the health officers. Confidence and progress in disease control provided the administration with motivation. For local residents, the happiness they felt when serving others led to a change in SC.

The sentiment felt by the CHVs was a key factor here as it underpinned the establishment of the "exchange of responses." The quotes below, collected from the CHVs, illustrate these positive sentiments.

Happiness

Happiness involves the pleasure of serving others; the happiness to learn and acquire new skills through training leads to empowerment. The satisfaction of watching the improvement of the health of children and the joy of acquainting new people with organizations and participating in networks is especially important. One interviewee said: "*I am happy to be able to learn new things and to help the community through the activities of CHV*" (49-year-old housewife from Rosario, Comayagua).

Another interviewee said: "What I obtained by serving as a CHV is knowledge about our health and that of the children and the satisfaction of helping the community... With the volunteers' activities, I lose time at work but for me it is more important to help the community. I will continue being a volunteer so that God accepts me in Paradise. For me the most important experience of being a CHV is to see how the children of the community improve in health" (male, 31-years-old farmer from Dolores, Intibucá).

Sense of Achievement

A sense of achievement was gained through contact with the administration or participation in the exchange of responses. According to one interviewee: "If I find a bug, I take it to the health center. If I give them a bug, the health center responds by spraying insecticide or creating educational activities. That is satisfactory and motivates me to send a bug again" (45-years-old housewife from Rosario, Comayagua).

Furthermore, the sense of satisfaction and achievement that is related to interaction with others, namely the support and appreciation of the community, is essential for successful vector control.

Pride

Pride and honor refers to the enhancement of self-confidence through increased attention, trust, respect, and reliance upon other people in the community. One interviewee said that, "When I chat, and all listen to me in silence, I see that I am admired. Only the CHV service gives me this sentiment" (44- years -old housewife from The Rodeo, Comayagua).

In the context of empowerment, it was also observed that people felt that they could exercise a new skill or discover a potential skill in themselves. Participants gained confidence as they developed their own responsibilities.

4.3.3 "Responsiveness" that Encourages Collective Action

The change of sentiment among the CHVs led to a sustainable intrinsic motivation to undertake vector surveillance, but it also brought a responsiveness between the administration and communities concerning vector control. In the process of creating this form of SC, we see various aspects of the other SCs mentioned in the first part of this paper; this in turn helps to

improve the efficiency of society by facilitating coordinated action around trust and norms, as discussed in the second part of this paper.

Coleman (1988) stated that there are three aspects of SC as a social structure for collective action: "obligation and expectations", norms and "effective sanctions", and "information channels". The first two of these are considered to be particularly enhanced by closure of social networks.²⁰ In the case of vector control, we can imagine that obligation and expectations arise both in the administration and in communities. If a CHV brings a bug to a health facility, that CHV expects a response from the administration of that facility; if the administration responds to him/her, then a new norm might be created. If we share the concept of generalized reciprocity (Putnam 1993), "exchange of response" can be understood as describing those mechanisms that produce altruism and generalized reciprocity in a community. When many individuals voluntarily perform acts that are not related to their direct self-interest, it is likely that the society to which they belong is rich in trust and that the society as a whole can benefit from such acts of altruism. A CHV who performs unpaid voluntary work for a community creates generalized reciprocity, and even though he or she cannot immediately get a direct benefit from that work, he or she may enjoy benefits in the future, such as an improvement of the whole environment or a new opportunity for social participation. The desire to eliminate vectors results in a cleanup of the whole community; the people must begin to think about the entire community not only themselves, otherwise the vectors may return.

The development of responsiveness sheds light on other important aspects of SC. It can be assumed that this process also promotes the further establishment and even the enforcement of responsiveness itself, by furthering its implementation.

²⁰ "Closure" here might be construed as presenting a "Closed Corporate Community"; - an approach particularly seen in the communities of indigenous people in those parts of Latin America where the vector is found.

4.4 A Volunteer Who Has Been Changed

Changes in individual sentiment can also be seen in the case of immunization activities in Bangladesh, outlined in Section 3. The behavior of the Volunteers demonstrated their norms to their colleagues and contributed to new norms that supported the widening acceptance of immunization. This section considers the sentiment of Volunteers sent to Bangladesh.

Volunteers expressed their sentiment in a variety of ways: happiness at the moment when their activities bore fruit, such as the adoption of a proposal, or a sense of belonging and teamwork brought about by intense human relationships fostered during the long walk to the vaccination point. Volunteers were also pleased when their Bangladeshi colleagues accorded them respect as they strove to undertake activities under harsh conditions. However, Volunteers also experienced negative feelings, i.e., disappointment and incompetence. Such feelings changed the views of one Volunteer:

"When I was assigned, I went to one hospital to greet a doctor. There I saw a man who was seriously injured in a traffic accident lying in front of the hospital. I had no doubt that the doctors of the hospital would treat that patient right away, but it seemed no one was taking care of him. I told the doctor who greeted me about the wounded man. But his answer was only "someone will take care" and he did not move for that. I was worried about that man during the meeting with the doctor, and when I looked outside through the window I found that man still left unattended. Then I informed the doctor about him again, the doctor finally went to him to transport him to another facility, but I learned that the man died soon.

To leave an injured man unattended in front of a medical facility in the middle of day would not happen in Japan. I was astonished and disappointed at the Bangla society. At the same time, I could not stop asking myself why I was not strong enough to ask for the doctor's immediate action at the initial stage. That man might have been saved if I had done so. I cannot forget that strong sentiment. There were moments when I felt I would give up my activities during my assignment, but at every such moment, I remembered these sentiments and told myself "I have to distinguish things to give up and not to give up, and raise my voice when needed in this Country." This sentiment has been the basis of my activity." (Shingo Takahashi, assigned to Chittagong CSO, dispatched 2010-2012).

After completing his two-year assignment in Chittagong, Takahashi re-volunteered to work at the EPI headquarters in Dhaka and continued his assignment as an EPI Volunteer.

These words show that the changes in sentiment, either in a positive or a negative way, bring about an intrinsic motivation to continue activities. In Honduras, a positive change in sentiment led to an improvement in the motivation of CHVs concerning vector control by altering the SC: responsiveness that bring "exchange of responses", however, in Bangladesh, the negative sentiment that many Volunteers shared also resulted in their motivation to carry out field activities.

5. Conclusions: The Volunteers Who Moved People's Hearts

Common themes for Volunteers sent to Bangladesh to take part in an EPI and to Honduras to assist with Chagas disease control, were: (1) the interface with people in the local community was most crucial for community involvement in infectious disease control; (2) the improvement and enlargement of health service activities in marginalized areas at the micro level brought about concrete outcomes; and (3) accuracy and sustainability were most essential for the routine work of local health administrations.

In addition, there were a number of similarities between the situations, including: (1) global initiatives for a particular infectious disease that has no borders were implemented through a WHO initiative; and (2) efforts in many countries were made simultaneously prompted by the strong political will that the WHO showed in securing support from several donor agencies. In any case, access to and the involvement of geophysical and socially marginalized peoples was essential for the attainment of this goal.

Against this background, these two groups of Volunteers tried to improve the routine work of local health administrators by connecting with them and enhancing the connection between health administrators and local communities. By motivating community members and raising awareness, the activities of the Volunteers produced outcomes in the communities. Both sets of Volunteers succeeded in creating and altering the SC of the communities by advancing into remote areas, talking directly to local people, and optimizing the advantage inherent in the "foreigner effect." Thus, the influence on norms and trust that the Volunteers had led to a new norm of wider acceptance of vaccinations in Bangladesh. The same change in sentiment brought the "exchange of responsiveness" that led to sustainable vector control in Honduras. Arguably, Volunteers played a key role in the achievement of Bangladesh's polio-free status in 2014 and in the WHO/PAHO's Certification of the interruption of Chagas disease transmission by the vector Rhodnius prolixus in Honduras in 2010/2011. In the course of their activities, the Volunteers helped to develop the trust, norms, responsiveness, and changes in sentiment of the local people toward health administrators and workers. In other words, the Volunteers succeeded in encouraging changes in the hearts and minds of the local people, which then contributed to an improvement in the sustained effect of their joint activities. In the Bangladeshi case, creating these norms lead trust in health workers and thus enabled another norm to develop among the people. In the Honduran case, circulation of trust and norms was more notable; trust lead to the norms and the norms brought about trust in return, which realizes the cycle of cognitive and institutional SC, thus creating another SC; responsiveness around this exchange.

In August 2016, the JOCV received a Ramon Magsaysay Award, the so-called "Nobel Prize of Asia." In its citation, the Ramon Magsaysay Award Foundation notes the contribution of the volunteers in Bangladesh: "In Bangladesh, a succession of a hundred volunteers over a

ten-year period improved the preventive polio vaccination rate, and eradicated polio and filariasis in the country."²¹

It should be noted that the Volunteers faced some important challenges in carrying out their activities. Being a young foreigner had some advantages but also had a negative side in terms of cultural and linguistic barriers, immaturity borne from inexperience, and the need for restraint on the technical side, as most of the Volunteers had little or no medical background. Moreover, their assignment period was two years, which also hampered their adjustment to the assigned places. These are the challenges faced by JOCVs throughout the world.²²

This paper has shown that the Volunteers altered the social capital of people in two developing countries, and that social capital brought about observable changes in the social behavior of the local people. A strengthening of norms and trust was seen in the Bangladeshi case, and in Honduras, the intrinsic motivation of community people, stimulated by sentiment, altered the local SC and established an "exchange of responses" that may ensure its sustainability. In both cases, the Volunteers moved and acted directly in relation to the hearts, minds, and sentiments of the people. Through these processes, Volunteers helped to establish a sustainable vector surveillance system with the participation of the community in Honduras, and it is likely that the infection rate of Chagas disease will decline as a result. In Bangladesh, after having

 $^{^{21}\} http://rmaward.asia/awardees/japan-overseas-cooperation-volunteers/.$

Retrieved 28 October, 2017.

²² The assistance given to young Volunteers by colleagues, neighbors, and members of the community should also be evaluated. Rina Tanaka (a Volunteer dispatched to the Rangpur Division in Bangladesh for filariasis control between 2012-2014), who received the Magsaysay Award in Manila in August 2016 on behalf of all the JOCVs, made the following points: "The real recipient of the prize may not be us, the Volunteers, but the people in Bangladesh who worked with us, confronting bravely the poverty and difficulties, but insisting on putting their blood into tackling the problems. We could not have worked without them; the people there received, appreciated, and supported us. We are away from home and everything around us; culture, religion, and sense of value and so on, in the surrounding environment were totally different. The people raised us, just like bringing up babies with care, cherished us, and always kept their eyes on us. This was why we could work peacefully. They gave us our place. I would like to thank everybody in the region, not only the people I directly worked with." Tanaka's words are introduced in the following article:

http://globalnation.inquirer.net/143737/japan-volunteer-keeps-coming-back Retrieved 28 October, 2017.

achieved polio-free status, an accurate vaccination EPI program may be sustained by the norms and trust that Volunteers promoted; in turn, this may contribute to the future prevention of other diseases, such as measles. Volunteer activities therefore not only assist infectious disease control in developing countries but can also lead to the strengthening of healthcare systems. In doing so, Volunteers may accelerate the progress of the host countries towards achieving Universal Health Coverage.

The importance of the hearts, minds, and sentiments of individuals must be taken into account when examining SCs and the sustainability of foreign aid. Moving peoples' hearts changed their SC and also brought about changes in the effects and sustainability of aid activities.

Based on the discussion above, more attention should be paid to sentiment and to the trust and norms of individuals undertaking aid activities in the field, in particular among both the people in the recipient countries and also the aid workers of the donor/partner countries. Foreign aid can no longer be viewed as a simple one-way transfer of resources from donors to recipients. Instead, a focus on the sentiment of the people who engage in development work will hopefully provide further mutual understanding of the exchanges of responses within the aid process. Indeed, it may be said that the aid process itself has an aspect of "exchanges of responses". Perhaps this is the convivialité brought about by circulation of sentiment, aimed at pursing sustainable benefits for all, where "no one will be left behind."²³

This paper is based, in part, on: Ueda, Naoko. 2016. "Sentiment and social capital in aid project: Chagas disease control in Honduras." *Community Development* 48:19-29. Copyright © Community Development Society. Reprinted by permission of Taylor & Francis Ltd, www.tandfonline.com on behalf of Community Development Society.

²³ http://www.mofa.go.jp/mofaj/files/000101401.pdf Retrieved 28 October, 2017.

References

- Bhuiya, Abbas, Ismat Bhuiya, and Mushtaque Chowdhury. 1995. "Factors affecting acceptance of immunization among children in rural Bangladesh." *Health Policy Plan* 10 (3): 304-11.
- Bourdieu, Pierre, and Jean-Claude Passeron. 1997. *Isan sozoku sha tachi : gakusei to bunka* [Les héritiers : Les étudiants et la culture]. Tokyo: Fujiwara shoten.
- Coleman, James. 1988. "Social Capital in the Creation of Human Capital." *American Journal of Sociology*. Vol 94, S95-S120

—. 1990. Foundation of Social Theory. Cambridge: Harvard University Press.

- Dahl, A. Robert. 1981. Poriaki [*Polyarchy: participation and opposition*]. Tokyo: San-ichi Publishing Co., Ltd.
- Directorate General of Health Services, Ministry of Health and Family Welfare. 2014. "Bangladesh EPI Coverage Evaluation Survey 2013." EPI.
- Evans, Peter. 1996. "Government Action, Social Capital and Development: Reviewing the Evidence on Synergy." In *State-Society Synergy: Government and Social Capital in Development*, edited by Peter Evans, 178-89. Berkeley: University of California-Berkeley.
- Funatsu, Mamoru. 2006. *Kanjo shakai gaku no tenkai* [The Development of emotional sociology]. Tokyo: Hokuju shuppan.
- Gambetta, Diego. 2010."Can we trust trust?" In *Foundations of Social Capital*, edited by E.Ostrom and T.K. Ahn, Cheltenham: Edward Elgar Publishing Ltd..274-90
- Hamashima, A., A. Ishikawa and I. Takeuchi. 2008. Shakaigaku shojiten [The compact dictionary of sociology]. Tokyo: Yuhikaku.
- Hashimoto, Ken. 2013. Chubei no shirarezaru fudobyo shagasubyo kokufukuhenomichi [The way to overcome Chagas disease, unknown endemic disease in Central America]. Tokyo: Diamond-Big Co., Ltd.
- Hashimoto, Ken and Kota Yoshioka. 2012. "Review: Surveillance of Chagas Disease." Advances in Parasitology 79: 375-428.
- Hochschild, Arlie R. 2000. Kanrisareru kokoro: kanjoga shohinninarutoki [The managed heart: Commercialization of human feeling].Kyoto: Sekaishisosha.
- Hotez, P., E. Dumonteil, L. Woc-Colburn, J.A. Serpa, S. Bezek, M.S. Edwards, M.E. Bottazzi. 2012. "Chagas disease: The new HIV/AIDS of the Americas." *PLoS Neglected Tropical Diseases* 6 (5), e1498. doi:10.1371/journal.pntd.0001498.
- JICA Bangladesh Office. 2007. Seinen Kaigai Kyoryokutai Kansenshotaisaku (polio/PEI) taiin katsudo hyoka hokokushoo [JOCV Infectious disease control volunteer evaluation report]. Dhaka: JICA Bangladesh Office (Internal Report).
- Ostrom, Elinor. 1990. Governing the Commons: The Evolution of Institutions for Collective Action. New York: Cambridge University Press.
- ———. 2010. "Introduction" in Foundations of Social Capital." In *Foundations of Social Capital*, edited by Elinor Ostrom and T.K. Cheltenham: Edward Elgar Publishing Ltd. xi-xxxix
- PAHO. 2006. "Estimación cuantitativa de la enfermedad de Chagas en las Américas." Pan American Health Organization, OPS/HDM/CD/425-06: Montevideo.
- Putnam, R. 1993. *Making Democracy Work: Civic Traditions in Modern Italy*. New Jersey: Princeton University Press.
 - —. 2001. *Bowling Alone: the Collapse and Revival of American Community*. New York: Simon & Schuster.

- Pieter, A.M., R. Chowdhury, and Pilar Ramos-Jimenez. 1999. "Patterns of vaccination acceptance." *Social Science and Medicine* 49 (12): 1705-16.
- Ueda, Naoko. 2013a. *Enjo to sosharu kyapitaru*: Aid and Social Capital A View from the Chagas Disease Control in Central America, doctoral dissertation for the University of Tokyo.
 - https://repository.dl.itc.u-tokyo.ac.jp/?action=pages_view_main&active_action=repository_view_main_item_detail&item_id=5468&item_no=1&page_id=28&block_id=31.
 - 2013b. Enjo to sosharu kyapitaru : Chubei shagasubyo taisaku kara no kosatsu, Aid and Social Capital A View from the Chagas Disease Control in Central America, Yokohama Kokusaikeizaigaku, 21 (3).283-321
 - ——. 2015. Kokoro to sosharu kyapitaru : Chubei shagasubyo taisaku kara no kosatsu [Mind, heart and social capital: A view from the Chagas disease control in Central America]. In Jissen to Kanjo : Kaihatsujinruigaku no shintenkai [Practice and Emotion: New Era of Development anthropology], edited by H. Sekine, H. 59-93. Kanagawa, Japan: Shumpu sha.
- WHO. 2015. "Chagas disease in Latin America: an epidemiological update based on 2010 estimates, *Trypanosoma cruzi* infection, transmission and disease." Weekly epidemiological record 6 (90): 33-44. http://www.who.int/wer/2015/wer9006.pdf?ua=1

Abstract (in Japanese)

要約

本稿の目的は、バングラデシュでのポリオ対策(拡大予防接種計画)と中米ホンジュ ラスでのシャーガス病媒介虫対策において、青年海外協力隊(JOCV)が活動の過程で いかに途上国の人々の規範、信頼や感情の変化をもたらしたかを考察することにある。 彼らの活動は、これらの変化を通じて活動に関わる人々をめぐるソーシャル・キャピ タルを変容させ、人々の行動変容と、活動成果の持続性をもたらした。

バングラデシュにおいて隊員は、彼らの規範を予防接種ワーカーたちに示すことによ り信頼を醸成し、それによってもたらされた住民にとっての新たな規範である予防接 種受容の拡大を通して、2014年の同国のポリオ根絶に貢献した。ホンジュラスにおい ては、隊員が働きかけた現地の住民保健ボランティアの感情のポジティブな変化(幸 福感、達成感と自信)を通じて、住民と保健行政との間に成立した規範と信頼、そし て"応答の交換"をもたらした内発的動機の生成について検討している。同国におい ては、隊員の介入により変容したこれらのソーシャル・キャピタルが媒介虫対策の持 続性確保を支えたと考えられる。

両国の例に共通するのは、隊員が彼らの現地同僚の活動地に常に同行し、同じ言語を 話し、活動の成功や失敗を共有した点である。隊員と現地の人々の協同は、人々の心 と感情に働きかけ、感染症対策の拡大と持続性確保に貢献した。著者は、これらの分 析を通じて援助現場の人々の心と感情に注目することの必要性を提言している。

キーワード:青年海外協力隊(JOCV)、ソーシャル・キャピタル、センチメント、ポ リオ対策/拡大予防接種計画、シャーガス病対策



JICA Research Institute

Working Papers from the same research project

"An Interdisciplinary Study of Japan Overseas Cooperation Volunteers (JOCV)"

JICA-RI Working Paper No. 158 What Motivates Japan's International Volunteers? Categorizing Japan Overseas Cooperation Volunteers (JOCVs) Yasunobu Okabe, Sakiko Shiratori and Kazuya Suda

JICA-RI Working Paper No. 116 Volunteer Disappointment and Outcome of Activities —Regional Perspective of Japan Overseas Cooperation Volunteers (JOCV)— Hisao Sekine

JICA-RI Working Paper No. 72 Political Origins of the Japan Overseas Cooperation Volunteers, 1960-1965: Why the State Sends Young Volunteers Abroad Yasunobu Okabe